USDA PESTICIDE DATA PROGRAM
WATER MONITORING SURVEY OVERVIEW
December 14, 2001

Objective

The goal of the Pesticide Data Program (PDP) Water Monitoring Survey is to collect monitoring data on pesticide residues in finished drinking water. These data will be used by the Environmental Protection Agency (EPA) to perform human health risk assessments and to test default assumptions used in drinking water computer modeling.

Background

Pesticide residue data in drinking water are necessary to support the Food Quality Protection Act (FQPA) enacted by the U.S. Congress in 1996. According to EPA, the Agency responsible for enforcement of FQPA, data available through various monitoring programs do not include all pesticides currently under evaluation. Reliable monitoring data on drinking water are needed to reduce uncertainties identified in risk assessments and help ensure that necessary mitigation actions are taken for the protection of public health and the environment.

The Agricultural Appropriations Bill for fiscal year (FY) 2001 provided the initial funding for a drinking water survey designed to provide these additional data. The United States Department of Agriculture (USDA) Pesticide Data Program (PDP) began a water survey in community water systems in New York and California in March 2001. For FY 2002, the water monitoring is expanding to other geographic regions of the United States. Samples are collected by the participating water facilities and sent to State laboratories participating in PDP. In addition, PDP will add a third laboratory to analyze water samples; the Colorado state laboratory will join California and New York in the PDP water program.

PDP sampling sites cover a wide range of land use conditions. Other considerations for site selection included hydrogeographical regions and population. The purposeful sampling is designed to cover regions EPA has identified as requiring monitoring data. Sampling will occur for at least one calendar year. In this manner, the data will reflect the regional distribution and seasonal variability of pesticide residues.

SAMPLING

In fiscal year 2002, samples will be collected twice a month at approximately 22 sites in New York and California, as they have since March 2001. In January 2002, PDP is adding weekly sample collections at five sites in Texas, Kansas, and Colorado. Samples are collected by the participating water facilities with the use of a kit that USDA provides through the use of a subcontractor. PDP works with EPA and The American Water Works Association, an organization of water supply professionals, to identify specific water treatment facilities. PDP then solicits the water facility's voluntary participation in the program. Standard reporting forms are used to capture necessary data such as the sampling location name and address, date and time of sample collection, and name of sample collector. This information becomes part of the chain-of-custody record.

Testing Protocols

PDP laboratories have adapted existing multiresidue water methods to use them for finished drinking water and to expand the number of analytes screened. Methods are validated before the data are accepted. Quality assurance and quality control measures are used to verify analytical results. In addition, all PDP laboratories are working toward IS0 17025 accreditation.

Data Reporting

Data are sent by testing laboratories to PDP Headquarters in Manassas, VA. USDA will release the data annually in a summary report. Standard PDP practices to ensure protection of confidential business information will be used when publishing data. Interim data will be available to water treatment facilities that are program participants. However, PDP reserves the right to be the first to publish these data. Interpretation of these data (such as the health consequences of a positive finding) is beyond the scope of PDP activities.